

ROMULEA ROSEA (IRIDACEAE): ADVENTIVE IN TEXAS

Jason R. Singhurst

Wildlife Diversity Program

Texas Parks and Wildlife Department,

Austin, Texas 78704 U.S.A.

jason.singhurst@tpwd.state.tx

Kay M. Fleming

809 E. Clinton Ave.

Athens, Texas 75751 U.S.A.

Ruth Loper

13456 CR 2235

Whitehouse, Texas 75791 U.S.A.

Virginia Privett

14839 CR3520

Brownsboro, Texas 75756 U.S.A.

and

Walter C. Holmes

Department of Biology

Baylor University

Waco, Texas 76798-7388 U.S.A.

walter_holmes@baylor.edu

ABSTRACT

Romulea rosea is reported as adventive in Texas.

Phytologia 91(1):73-75 (April, 2009).

KEY WORDS: Iridaceae, *Romulea*, Texas, invasive plant.

Romulea is a genus of about 90 species that is distributed in Africa, southern Europe, and the Middle East (Goldblatt 2002). One

species, *R. rosea*, the sand crocus, a native of South Africa, is naturalized in Europe, the British Isles, Australia, New Zealand and in several coastal counties of California (The Nature Conservancy 2005). Based upon the specimens cited below, this species may now be reported as adventive in Texas.

***Romulea rosea* (L.) Eckl. (Iridaceae).**

Voucher specimens: TEXAS. Henderson Co.: West side of County Road 3520, ca. 200 yards south of the junction of County Road 3520 and FM 2339, 24 Mar 2005, Fleming 1211 (BAYLU); West side of County Road 3520, ca. 200 yards south of the junction of County Road 3520 and FM 2339, 25 Mar 2005, Fleming 1212 (BAYLU).

In 2005, the population consisted of approximately twenty individuals scattered over about one-half hectare under closed, undisturbed forest canopy dominated by *Pinus taeda*, *Liquidambar styraciflua*, *Quercus* spp., and *Carya* sp. In March 2008, the population was estimated to be "at least 100 plants over a larger area" (Fleming, pers. obs.).

Five varieties of *Romulea rosea* are recognized by de Vos (1972). The specimens reported here correspond to variety *R. australis* (Ewart) M. P. de Vos. Goldblatt (2002) mentions that this variety has become a common weed of lawns, pathways, and roadsides in Australia, where it is a pest. He further mentions that, to date, this situation does not seem to be the case for the parts of California where the species occurs. While at present there is no evidence of the species becoming a pest in Texas, its invasive nature in Australia justifies that its presence in the state be closely monitored.

Romulea rosea exhibits a pattern of spread that is similar to several other species reported as adventive in Texas. These species were initially reported as adventive to California (or the west coast), then later discovered in eastern Texas. However, the source of the plants adventive in Texas is unknown. Plants with this pattern of distribution include *Bellardia trixago* (L.) All. (Scrophulariaceae) (Lipscomb & Ajilvsgi 1982, Do et al. 1996), *Centaurium muhlenbergii* (Griseb.) Piper (Gentianaceae) (Holmes & Wivagg 1996), and *Parentucellia viscosa* (L.) Caruel (Scrophulariaceae) where it appears

to have been a “late” entry into the Manual of the Vascular Plants of Texas (Correll & Johnston 1970). Inclusion in the manual was based upon a 1969 collection (Correll 37239, TEX) of the species in Jasper Co. Tracing the application of the name in the state was complicated by the name not being included in the index of the manual.

ACKNOWLEDGEMENTS

We are grateful too Dr. Lynn Sherrod at University of Texas at Tyler for his assistance with determining the species of *Romulea*.

LITERATURE CITED

- De Vos, M. P. 1972. The genus *Romulea* in South Africa. J. S. African Bot., suppl. 9.
- Correll, D. S. and M. C. Johnston. 1970. Manual of the Vascular Plants of Texas. Texas Research Foundation, Renner.
- Do, L. H., W. C. Holmes, and J. R. Singhurst. 1996. New County Records for *Bellardia trixago* (Scrophulariaceae) in Texas. *Sida* 17: 291-294.
- Goldblatt, P. 2002. *Romulea*. In: Flora of North America Editorial Committee, eds., *Flora of North America North of Mexico* 26. Magnoliophyta: Liliidae: Liliales and Orchidales. Oxford Univ. Press, New York and Oxford. p. 407 [illustration p. 406].
- Holmes, W. C. and D. E. Wivagg. 1996. Identification and Distribution of *Centaurium muhlenbergii* and *C. pulchellum* (Gentianaceae) in Louisiana, Mississippi, and Texas. *Phytologia* 80: 23-29.
- Lipscomb, B. and G. Ajilvsgi. 1982. *Bellardia trixago* (L.) All. (Scrophulariaceae) adventive in Texas. *Sida* 9:370-374.
- The Nature Conservancy of Texas. 2005. Global Invasive Species Team. <http://tncweeds.ucdavis.edu/alert/alrtromu.html>, 20 March 2008.